



**Land at 10 Barrack Lane, Aldwick**

**Preliminary Ecological Appraisal**

**21<sup>st</sup> August 2018**



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|-----------------------|-------------------------------------|
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# 1 Introduction

## 1.1 Site Description

The site comprises land to the side and rear of 10 Barrack Lane, in the eastern part of Aldwick, in the County of West Sussex at approximate postcode PO21 4BZ. The site, which is estimated to be around 0.1 hectare in size, is centred on Ordnance Survey grid reference SZ 910 988 and contains garden areas with outbuildings.

The land surrounding the site is suburban in character, containing residential properties, roads, amenity grassland and scattered trees. The site and surrounding area are illustrated in aerial images provided in Appendix 1 and photographs of the site are provided in Appendix 2.

## 1.2 Proposed Works

It is understood that the proposed works are the subject of a planning application to Arun District Council, the Local Planning Authority (LPA), for the construction of a new residential dwelling with associated driveway.

## 1.3 Aims of Study

To inform the planning application, GreenLink Ecology Ltd. has been commissioned to conduct a preliminary ecological appraisal (PEA) of the site, to identify what habitats are present and look for any evidence of, or potential for, protected/notable species.

The aims of this report are to present the results of the survey work, describe the habitat characteristics of the site, assess the potential for the proposed works to impact on habitats/protected/notable species and make recommendations for mitigation/enhancement measures to comply with legislation and policy.

## 2 Methodology

A survey was undertaken on 13<sup>th</sup> August 2018 by experienced consultant ecologist Marcus Fry MCIEEM<sup>1</sup>, in accordance with the published guidelines<sup>2/3</sup>. The native plant species and habitat types present were identified and any evidence of, or potential for, protected/notable species and their habitats was recorded. On the day of the survey, the weather conditions were sunshine with scattered cloud and the temperature at midday was around 24°C.

In addition, the Multi Agency Geographic Information for the Countryside (<http://magic.defra.gov.uk>) database was accessed for information relating to designated sites from within the surrounding area.

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<sup>1</sup> Member of the Chartered Institute of Ecology and Environmental Management (Full)

<sup>2</sup> JNCC, (1990), Handbook for Phase 1 Habitat Survey - A Technique for Environmental Audit, Revised Reprint 2007

<sup>3</sup> CIEEM (2012) Technical Guidance Series – Guidelines for Preliminary Ecological Appraisal. Institute of Ecology and Environmental Management, May 2012.

### 3 Results

#### 3.1 Habitat Description

In addition to the outbuildings, which are considered in a subsequent section, the site contains hard standing, amenity grassland, miscellaneous planting and scattered trees.

The hard standing comprises the shingle driveway at the existing entrance, along with paved foot paths and patio area. This represents an artificial habitat type that is of inherently low ecological value.

There is amenity grassland adjacent to the hard standing and miscellaneous planting, which is species-poor in composition and dominated by perennial rye-grass (*Lolium perenne*), along with dandelion (*Taraxacum officinale*), clover (*Trifolium repens*) and yarrow (*Achillea millefolium*). This represents a common/widespread habitat type that is of low ecological value.

There is miscellaneous planting located throughout the site, which is predominantly comprised of non-native ornamental planting. This represents a common/widespread habitat type that is of low ecological value.

There are low numbers of scattered trees present on the site boundaries and in the eastern part of the site, including oak (*Quercus robur*), yew (*Taxus baccata*), silver birch (*Betula pendula*), maple (*Acer* sp.), hazel (*Corylus avellana*), hawthorn (*Crataegus* sp.), holm oak (*Quercus ilex*), holly (*Ilex aquifolium*) and cherry plum (*Prunus cerastifera*), along with non-native broadleaved and evergreen species. The trees are the subject of an independent report and drawings by Ramsay and Co. Landscape Architecture, which makes an evaluation of their arboricultural value.

None of the plants recorded during the survey are protected/notable species (although it is understood that some of the trees are covered by a Tree Preservation Order) and they do not constitute habitats that are of conservation concern.

#### 3.2 Protected/Notable Species

##### 3.2.1 Bats

Since the proposals include the removal/disturbance of the existing outbuildings, which could impact on bats (if present), these were assessed by a Natural England licence holder (licence no. 2016-10955-CLS) using a 3000 lumen LED torch and ladder for any evidence of, or potential for bats. Features and evidence considered during the survey included:

- Roof and wall construction;
- Features that have the potential to be actual bat roosts or provide access to roosting opportunities within the buildings;
- Any droppings and/or staining on external walls;
- Scattered or accumulated bat droppings (identified by their dry, powdery texture when compressed) within the buildings or around entrances to potential roosts;
- Oily staining, scratch marks and/or urine staining around access points to potential roosting locations;
- Places where cobwebs have been swept away; and
- The actual presence of live/dead bats.

During the assessment of the outbuildings, there was no evidence of bats recorded and only low roosting potential was identified in relation to a small 'bus-shelter' in the western part of the site (which is to remain unaffected), where there are low numbers of gaps between some roof tiles.

Since there will need to be trees removed to facilitate the development, these were assessed and categorised (to align with BS 8596:2015 "Surveying for Bats in Trees and Woodland") in accordance with the 2016 Bat Conservation Trust's (BCT) guidance<sup>4</sup>:

- Negligible potential – Unlikely to be used by roosting bats.
- Low potential – A tree of sufficient size and age to contain potential roost features but with none seen from the ground or features seen with only limited roosting potential
- Moderate potential – A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation significance.
- High potential – A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, protection, conditions and surrounding habitat.

In summary, all of the trees to be removed (as identified in the independent report and drawings by Ramsay and Co. Landscape Architecture) were assessed as having negligible potential for roosting bats due to their immaturity and lack of suitable roost features. Whilst some of the boundary trees were considered to have low roosting potential, these will be unaffected by the proposals.

### 3.2.2 Breeding Birds

There was no evidence for actively breeding birds recorded during the survey, which was undertaken late in the breeding season (March-July/August). However, the larger shrubs within the miscellaneous planting, along with the scattered trees represent potentially suitable habitat for use by nesting birds during the breeding season.

### 3.2.3 Reptiles

Reptiles were initially considered during the survey, since the garden areas appear to be relatively mature and could potentially support species such as common lizard (*Zootoca vivipara*) and slow worm (*Anguis fragilis*). However, there was no evidence for the presence of these species and as illustrated in the aerial photographs in Appendix 1, the surrounding area contains a relatively high density of residential properties with no connectivity to semi-natural habitats. It is therefore considered unlikely that the site or immediate surrounding area supports a population of reptiles.

## 3.3 Designated Sites

According to the Multi Agency Geographic Information for the Countryside database, the closest statutory designated site for nature conservation is circa 600 metres to the south of the proposed development site, which is Bognor Reef Site of Special Scientific Interest (SSSI), designated for supra-littoral sediment habitat (beach).

<sup>4</sup> Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, Bat Conservation Trust (3<sup>rd</sup> Edition)

## 4 Assessment

### 4.1 Constraints

It was possible to access all relevant parts of the site and the survey was undertaken by an experienced consultant ecologist using standard survey techniques. It is therefore considered that there were no significant constraints to the PEA.

### 4.2 Potential Impacts

#### 4.2.1 Habitats

The site contains common and widespread habitat types that are not of conservation concern and impacts to these habitats are considered insignificant.

Potential impacts to the retained trees are considered in the independent report and drawings by Ramsay and Co. Landscape Architecture.

#### 4.2.2 Protected/Notable Species

##### 4.2.2.1 Bats

During the survey, there was no evidence of bats recorded and only low potential for roosting bats was identified in association with a 'bus-shelter' outbuilding that will be unaffected by the proposals. It is therefore considered that there is no significant risk of impacts to bats as a result of the proposed works.

##### 4.2.2.2 Breeding Birds

Although no evidence for breeding birds was recorded during the survey, there is potentially suitable habitat present for use by nesting birds during the breeding season, some of which will be removed/disturbed.

Therefore, breeding birds could be directly impacted on by the proposed works, if site clearance is undertaken during the breeding season (March-July/August, as a guide). To avoid the seasonal risk of impacts to breeding birds, precautionary mitigation measures are recommended in a subsequent section.

##### 4.2.2.3 Reptiles

Since it is unlikely that the site or immediate surrounding area supports a population of reptiles, the risk of potential impacts to reptiles during the site clearance works is considered to be low.

#### 4.2.3 Designated Sites

Since the closest statutory designated site is located circa 600 metres to the south of the proposed development site and buffered from it by substantial areas of land, it is considered that there is no perceived risk of potential impacts to designated sites as a result of the proposed works.

## 4.3 Legislation and Policy

### 4.3.1 Bats

All species of bat and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended by the CROW Act 2000), and by the Conservation of Habitats and Species Regulations 2010, which consolidates all the various amendments made to the Conservation

(Natural Habitats, &c.) (Amendments) Regulations 1994 in respect of England and Wales. The 1994 Regulations transposed Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) into national law.

The legislation makes it illegal under the Wildlife and Countryside Act 1981 (as amended) to:

- Intentionally or recklessly kill, injure or take a wild bat;
- Be in possession or control of any live or dead wild bat, or any part of, or anything derived from a wild bat;
- Intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection; and
- Intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection.

Bats are also European Protected Species (EPS). As such under the Conservation of Habitats and Species Regulations 2010 it is an offence to:

- Deliberately capture, injure or kill any wild animal of a European Protected Species;
- Deliberately disturb wild animals of any such species. Disturbance of animals includes in particular any disturbance which is likely to:
  - impair their ability -
    - to survive, to breed or reproduce, or to rear or nurture their young; or
    - in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
  - to affect significantly the local distribution or abundance of the species to which they belong;
- Deliberately take or destroy the eggs of such an animal; or
- Deliberately damage or destroy a breeding site or resting place of such an animal.

#### 4.3.2 Breeding Birds

Breeding birds are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally or recklessly kill, injure or take any wild bird or take, damage or destroy its nest whilst it is in use or being built, or to take or destroy its eggs. In addition, some species of bird are listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended), for which there are additional offences of disturbing these birds at their nests, or their dependent young.

#### 4.3.3 Reptiles

All species of reptile native to the UK are afforded legal protection under the Wildlife and Countryside Act 1981 (as amended) in respect of deliberate, intentional or reckless killing and injuring.

#### 4.3.4 National Planning Policy Framework

The Government published the National Planning Policy Framework (NPPF) in 2012, which replaced previous policy documents, including Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation. The NPPF states that when determining planning applications, LPAs should aim to conserve and enhance biodiversity by encouraging opportunities to be taken for the incorporation of biodiversity in and around developments.

## 5 Recommendations

### 5.1 Mitigation Measures

#### 5.1.1 Habitats

Mitigation measures are not considered necessary for the hard standing, amenity grassland and miscellaneous planting, since these are common/widespread types that are not of conservation concern.

Mitigation measures for retained trees are described in the independent report and drawings by Ramsay and Co. Landscape Architecture, to ensure that they are protected in accordance with BS 5837:2012 "*Trees in Relation to Design, Demolition and Construction - Recommendations*".

#### 5.1.2 Protected/Notable Species

##### 5.1.2.1 Bats and Reptiles

Since it is considered that there is no significant risk of bats or reptiles being directly impacted on by the proposed works, mitigation measures should not be required for these legally protected species.

However, if at any time during the proposed works, it becomes apparent that bats and/or reptiles are present and at risk of direct impacts, works will need to cease whilst an experienced ecologist is contacted and consulted about how to proceed without the risk of an offence being committed.

##### 5.1.2.2 Breeding Birds

The clearance of potentially suitable breeding habitat should ideally be undertaken outside of the breeding bird season (avoiding March-July/August). If it is necessary to conduct this work during the breeding season, it should be carried out under the supervision of an experienced ecologist, who will check the habitats for the presence/absence of any birds' nests.

If any active nests are found then works with the potential to impact on the nest must cease and an appropriate buffer zone should be established until the young have fledged and the nest is no longer in use.

#### 5.1.3 Designated Sites

Since it is considered that there is no significant risk of impacts to designated sites as a result of the proposed works, mitigation measures are not required for designated sites.

### 5.2 Enhancement Measures

To ecologically enhance the site in accordance with the principles of the NPPF (Section 4.3.4), the following guideline measures should be implemented, which are considered proportionate to the scale of the proposed development:

- The new building should incorporate 2 no. wall-integrated bat boxes (<http://www.birdbrickhouses.co.uk/brick-nesting-boxes/bat-box/>) and 2 no. wall-integrated bird nesting boxes (<http://www.birdbrickhouses.co.uk/brick-nesting-boxes/nesting-boxes/>), which should be installed at least 4 and 2 metres (respectively) from ground level on different elevations. In the absence of shade, none of the bird boxes should be facing due south, to avoid over-heating during the summer months.

## 6 Conclusions

GreenLink Ecology Ltd. was commissioned to undertake a PEA of the site, which has been conducted without significant constraint.

The survey that was undertaken on 13<sup>th</sup> August 2018 by an experienced consultant ecologist, determined that the site contains habitats that are common/widespread and not of conservation concern. Mitigation measures for habitats are only considered necessary for retained trees, as detailed in the independent report and drawings by Ramsay and Co. Landscape Architecture.

During the survey, the potential presence of legally protected/notable species was considered, including bats, breeding birds and reptiles.

Since it is considered that there is no significant risk of bats or reptiles being impacted on by the proposed works, mitigation measures have only been recommended on a precautionary basis to avoid the seasonal risk of impacts to breeding birds.

Although there is a designated site for nature conservation in the local area, there is no perceived risk of impacts as a result of the proposed works and therefore, no need for mitigation measures.

In accordance with the NPPF, recommendations have also been made for ecological enhancement measures to benefit local biodiversity, in particular bats and breeding birds.

Overall, there are no known overriding ecological constraints that would prevent the proposed works going ahead, subject to the recommendations made in this report being correctly implemented.

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## 8 Appendices

Appendix 1: The site location (within the red-line) and surrounding area

Photograph 1: The approximate site boundaries and immediate surrounding area



Photograph 2: The site location and wider surrounding area



## Appendix 2: Photographs of the site

Photograph 1: View of the existing site entrance off Barrack Lane, looking north



Photograph 2: Location of the proposed driveway, looking south



Photograph 3: Location of the proposed driveway, looking north



Photograph 4: View of the proposed dwelling location, looking north-west



Photograph 5: View of the proposed dwelling location, looking north-east



Photograph 6: View of the proposed dwelling location, looking east

